

A2  
SUB B3

22. (Amended) A method to inhibit expression of a target gene comprising:  
providing an organism containing a target cell, wherein the target cell contains the  
target gene and the target gene is expressed in the target cell;  
contacting a ribonucleic acid (RNA) with the organism, wherein the RNA is  
comprised of a double-stranded structure with duplexed ribonucleic acid strands and  
one of the strands is able to duplex with a portion of the target gene of at least 25  
bases in length; and introducing the RNA into the target cell, thereby inhibiting  
expression of the target gene.

Claim 35, line 1, replace "claim 35" with --claim 22--.

Kindly cancel nonelected claims 36-38 without prejudice.

A3  
SUB B7

39. (Amended) A kit comprising reagents for inhibiting expression of a target  
gene in a cell, wherein said kit comprises a means for introduction of a ribonucleic  
acid (RNA) into the cell in an amount sufficient to inhibit expression of the target  
gene, and wherein the RNA has a double-stranded structure with an identical  
nucleotide sequence as compared to a portion of the target gene of at least 25  
bases in length.

Kindly add the following new claims.

A4  
SUB B8

--40. A method to inhibit expression of a target gene in a cell of an  
invertebrate animal comprising introduction of a ribonucleic acid (RNA) into the cell  
in an amount sufficient to inhibit expression of the target gene, wherein the RNA

comprises a double-stranded structure with an identical nucleotide sequence as compared to a portion of the target gene of at least 25 bases in length.

A4  
DST.  
SUB D8  
Cont.

41. A method to inhibit expression of a target gene in a cell comprising introduction of a ribonucleic acid (RNA) into the cell in an amount sufficient to inhibit expression of the target gene, wherein the RNA is comprised of a double-stranded structure with duplexed ribonucleic acid strands and one of the strands is able to specifically hybridize in the cell to an RNA transcript from the target gene.

42. A method to inhibit expression of a target gene comprising: providing an organism which is a plant or an animal, wherein the target gene is expressed in the organism; introducing an expression construct into the organism to produce a transgenic organism, wherein the expression construct produces a ribonucleic acid (RNA) comprised of a double-stranded structure with duplexed ribonucleic acid strands and one of the strands is able to specifically hybridize with a transcribed portion of the target gene; and producing the RNA in the transgenic organism in an amount sufficient to inhibit expression of the target gene.--

#### REMARKS

Claims 1-35 and 39-42 are pending. Reconsideration is requested.

A supplemental information disclosure statement (IDS) was filed December 1, 2000. Consideration of the references submitted therein is respectfully requested.

The amendments are supported by Applicants' description of their invention. Thus, no new matter is added to the disclosure as originally filed. In particular, specific hybridization between a strand of the duplex RNA and a transcribed portion of the target gene is supported by page 7, lines 1-2, and page 11, lines 24-27, of the